## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

# 1. (Currently Amended) A subscriber unit comprising:

a feature extraction module configured to extract a plurality of features of a speech signal, the plurality of features comprising speech frames extracted from the speech signal and-being used for voice recognition;

a voice activity detection module configured to detect voice activity within the speech signal, to divide the speech signal into speech frames and non-speech frames, wherein speech is detected in the speech frames and speech is not detected in the non-speech frames, and to provide an indication of detected voice activity, wherein the indication of detected voice activity comprises the speech frames without the non-speech frames; and

a wireless transmitter coupled to the feature extraction module and the voice activity detection module and configured to transmit the indication of detected voice activity and the plurality of features over a wireless network to a voice recognition device in a distributed voice recognition system, wherein the indication of detected voice activity is transmitted at least one frame earlier than the plurality of features.

# 2. (Currently Amended) A subscriber unit comprising:

means for extracting a plurality of features of a speech signal, the plurality of features comprising speech frames extracted from the speech signal and being used for voice recognition;

means for detecting voice activity within the speech signal, dividing the speech signal into speech frames and non-speech frames, wherein speech is detected in the speech frames and speech is not detected in the non-speech frames, and providing an indication of

Attorney Docket No. 010331 Application No. 10/017,375

detected voice activity, wherein the indication of detected voice activity comprises the speech frames without the non-speech frames; and

means for transmitting the indication of detected voice activity and the plurality of features over a wireless network to a voice recognition device in a distributed voice recognition system, wherein the indication of detected voice activity is transmitted at least one frame earlier than the plurality of features.

- 3. (Canceled)
- 4. (Canceled)

### 5. (Currently Amended) A method comprising:

extracting a plurality of features of a speech signal, the plurality of features comprising speech frames extracted from the speech-signal and being used for voice recognition:

detecting voice activity within the speech signal, <u>dividing the speech signal into</u>
speech frames and non-speech frames, wherein speech is detected in the speech frames and
speech is not detected in the non-speech frames, and providing an indication of detected
voice activity, wherein the indication of detected voice activity comprises only the speech
frames; and

transmitting the indication of detected voice activity and the plurality of features over a wireless network to a voice recognition device in a distributed voice recognition system, wherein the indication of detected voice activity is transmitted at least one frame earlier than the plurality of features.

### 6. (Currently Amended) A method comprising:

extracting a plurality of features of a speech signal, the plurality of features comprising speech frames extracted from the speech signal and being used for voice recognition;

detecting voice activity within the speech signal, <u>dividing the speech signal into</u> speech frames and non-speech frames, wherein speech is detected in the speech frames and speech is not detected in the non-speech frames, and providing an indication of detected voice activity, wherein the indication of detected voice activity comprises the speech frames without the non-speech frames; and

combining the plurality of features and the indication of detected voice activity, thereby creating a combined indication of detected voice activity and features, wherein the indication of detected voice activity is transmitted at least one frame earlier than the plurality of features to a voice recognition device in a distributed voice recognition system.

#### 7. (Canceled)

- 8. (Previously Presented) The subscriber unit of claim 1, further comprising:
- a control module configured to receive from the voice recognition device in the distributed voice recognition system at least one word or command estimated based on the indication of detected voice activity and the plurality of features.
- (Previously Presented) The subscriber unit of claim 8, wherein the control module is further configured to initiate an action at the subscriber unit based on the at least one word or command.
- 10. (Previously Presented) The subscriber unit of claim 8, wherein the control module is further configured to initiate dialing of a phone number or displaying of information on a screen in response to the at least one word or command.
- 11. (Previously Presented) The subscriber unit of claim 1, wherein the voice activity detection module is configured to declare an end of the detected voice activity when a silence duration exceeds a predetermined period of time.
- 12. (Previously Presented) The subscriber unit of claim 1, wherein the plurality of features are based on frequency characteristics of the speech signal.

- 13. (Previously Presented) The subscriber unit of claim 1, wherein the plurality of features are sent with a lower bit rate during silence periods.
- 14. (Previously Presented) The subscriber unit of claim 2, further comprising: means for receiving from the voice recognition device in the distributed voice recognition system at least one word or command estimated based on the indication of detected voice activity and the plurality of features.
- (Previously Presented) The subscriber unit of claim 14, further comprising: means for initiating an action at the subscriber unit based on the at least one word or command.
- 16. (Previously Presented) The subscriber unit of claim 14, further comprising: means for initiating dialing of a phone number or displaying of information on a screen in response to the at least one word or command.
- 17. (Previously Presented) The subscriber unit of claim 2, further comprising: means for declaring an end of the detected voice activity when a silence duration exceeds a predetermined period of time.
- 18. (Previously Presented) The subscriber unit of claim 2, further comprising: means for determining the plurality of features based on frequency characteristics of the speech signal.
- 19. (Previously Presented) The subscriber unit of claim 2, further comprising: means for sending the plurality of features with a lower bit rate during silence periods.
- 20. (Previously Presented) The method of claim 5, further comprising:

receiving from the voice recognition device in the distributed voice recognition system at least one word or command estimated based on the indication of detected voice activity and the plurality of features.

- (Previously Presented) The method of claim 20, further comprising: initiating an action at a subscriber unit based on the at least one word or command.
- 22. (Previously Presented) The method of claim 20, further comprising: initiating dialing of a phone number or displaying of information on a screen in response to the at least one word or command.
- 23. (Previously Presented) The method of claim 5, further comprising: declaring an end of the detected voice activity when a silence duration exceeds a predetermined period of time.
- (Previously Presented) The method of claim 5, further comprising: determining the plurality of features based on frequency characteristics of the speech signal.
- (Previously Presented) The method of claim 5, further comprising:
   sending the plurality of features with a lower bit rate during silence periods.
- 26. (Currently Amended) A computer-readable medium storing computer executable instructions that when executed, causes a processor to perform the steps of:

extract a plurality of features of a speech signal, the plurality of features e<del>omprising speech frames extracted from the speech signal and</del> being used for voice recognition;

detect voice activity within the speech signal, divide the speech signal into speech frames and non-speech frames, wherein speech is detected in the speech frames and speech is not detected in the non-speech frames, and provide an indication of detected voice activity, wherein the indication of detected voice activity comprises the speech frames without the non-speech frames; and

transmit the indication of detected voice activity and the plurality of features over a wireless network to a voice recognition device in a distributed voice recognition system, wherein the indication of detected voice activity is transmitted at least one frame earlier than the plurality of features.

27. (Previously Presented) The computer-readable medium of claim 26, wherein the indication of detected voice activity and the plurality of features are obtained with different processing delays; and wherein the instructions upon execution further cause a processor to:

combine the plurality of features and the indication of detected voice activity, thereby creating a combined indication of detected voice activity and features, wherein the indication of detected voice activity is transmitted at least one frame earlier than the plurality of features to the voice recognition device in the distributed voice recognition system.

 (Previously Presented) The computer-readable medium of claim 26, wherein the instructions upon execution further cause a processor to:

receive from the voice recognition device in the distributed voice recognition system at least one word or command estimated based on the indication of detected voice activity and the plurality of features.

29. (Previously Presented) The computer-readable medium of claim 28, wherein the instructions upon execution further cause a processor to:

initiate an action at a subscriber unit based on the at least one word or command.

30. (Previously Presented) The computer-readable medium of claim 28, wherein the instructions upon execution further cause a processor to:

initiate dialing of a phone number or displaying of information on a screen in response to the at least one word or command.

31. (Previously Presented) The computer-readable medium of claim 26, wherein the instructions upon execution further cause a processor to: declare an end of the detected voice activity when a silence duration exceeds a predetermined period of time.

32. (Previously Presented) The computer-readable medium of claim 26, wherein the instructions upon execution further cause a processor to:

determine the plurality of features based on frequency characteristics of the speech signal.

33. (Previously Presented) The computer-readable medium of claim 26, wherein the instructions upon execution further cause a processor to:

send the plurality of features with a lower bit rate during silence periods.